

What is claimed is:

1. A wiper blade for a wiper system that wipes a wiping surface of a vehicle and includes a wiper arm rotatably connected to the wiper blade, the wiper blade comprising:

a blade rubber that wipes the wiping surface and includes two primary grooves, wherein the primary grooves extend in a first direction parallel to a central axis of the wiper blade and are arranged in first and second lateral sides, respectively, of the blade rubber that are opposed to one another in a second direction perpendicular to the first direction and generally parallel to the wiping surface;

two backing plates that extend in the first direction and are received in the primary grooves, respectively, of the blade rubber;

a holder that is rotatably connected to the wiper arm and detachably holds the blade rubber, which has the backing plates; and

a resilient fin that extends in the first direction and is connected to the holder, wherein the fin limits lifting of the wiper blade from the wiping surface when the vehicle is running.

2. The wiper blade according to claim 1, wherein:

the blade rubber further includes:

a wiping lip that wipes the wiping surface; and

a connecting body that is connected to the holder and includes the primary grooves; and

the fin includes two claws that cooperate together to clamp the connecting body of the blade rubber.

3. The wiper blade according to claim 2, wherein:

the connecting body further includes two secondary grooves, which extend in the first direction and are arranged in the first and second lateral sides, respectively, of the blade rubber; and

the secondary grooves receive the claws, respectively, of the fin.

4. The wiper blade according to claim 3, wherein:

the holder includes at least one pair of claws; and

the secondary grooves further receive the claws, respectively, of each pair of the holder.

5. The wiper blade according to claim 4, wherein the blade rubber includes at least one holding portion that engages with the holder to limit movement of the holder in the first direction.

6. The wiper blade according to claim 5, wherein the at least one holding portion of the blade rubber is provided in at least one of the secondary grooves.

7. The wiper blade according to claim 5, wherein the at least one holding portion of the blade rubber holds the holder at a longitudinal center of the blade rubber.

8. The wiper blade according to claim 5, wherein:

each holding portion of the blade rubber has a slope;

a distance between the holder and a first end of the slope of each holding portion is smaller than a distance between the holder and a second end of the slope of the holding portion; and

a distance between a central axis of the blade rubber and the first end of the slope of each holding portion is greater than a distance between the central axis of the blade rubber and the second end of the slope of the holding portion.

9. The wiper blade according to claim 5, wherein:

the at least one pair of claws of the holder includes first and second pairs of claws;

the first pair of claws is spaced from the second pair of claws in the first direction;

the at least one holding portion includes first and second pairs of holding portions;

the holding portions of each pair are provided in the secondary grooves, respectively; and

the first pair of holding portions is spaced from the second pair of holding portions in the first direction, such that the first and second pairs of claws are positioned between the first pair of holding portions and the second pair of holding portions.

10. The wiper blade according to claim 3, wherein:

the holder includes at least one pair of claws;

the connecting body further includes two tertiary grooves,

which extend in the first direction and are arranged in the first and second lateral sides, respectively, of the blade rubber;

the tertiary grooves receive the claws, respectively, of each pair of the holder; and

the tertiary grooves are positioned between the primary grooves and the wiping lip.

11. The wiper blade according to claim 1, wherein an opening of each primary groove is covered by the fin.

12. The wiper blade according to claim 1, wherein:

the holder includes at least one engaging protrusion; and
the fin includes at least one engaging hole, which respectively receives the at least one engaging protrusion of the holder.

13. The wiper blade according to claim 12, wherein each engaging protrusion of the holder includes an anchoring projection, which projects away from the rest of the engaging protrusion and resists removal of the engaging protrusion from a corresponding one of the at least one engaging hole of the fin.

14. The wiper blade according to claim 12, wherein the at least one engaging hole of the fin and the at least one engaging protrusion of the holder are engaged one another in a third direction, which is generally perpendicular to the wiping surface.

15. The wiper blade according to claim 1, wherein the fin further includes two stopper walls, which are provided at longitudinal ends, respectively, of the fin to engage with longitudinal ends of the blade rubber.

16. The wiper blade according to claim 1, wherein the fin further includes:

two fin sections that are arranged on opposite sides, respectively, of the holder in the first direction; and

a cover portion that covers opposed lateral walls of the holder and connects between the fin sections.

17. The wiper blade according to claim 1, further comprising at least one support member that detachably holds the blade rubber and the backing plates and is connected to the fin, wherein the at least one support member is spaced from the holder in the first direction.

18. The wiper blade according to claim 17, wherein:

each support member includes an engaging protrusion; and
the fin further includes at least one connecting hole, each of which receives the engaging protrusion of a corresponding one of the at least one support member to connect between the fin and the corresponding support member.

19. The wiper blade according to claim 1, further comprising

a resilient holding member, which extends in the first direction and at least partially overlaps with the holder, wherein the holding member detachably holds the blade rubber and the backing plates and is connected to the fin.

20. A wiper blade for a wiper system that wipes a wiping surface of a vehicle and includes a wiper arm rotatably connected to the wiper blade, the wiper blade comprising:

a blade rubber that wipes the wiping surface and includes:

two primary grooves, which extend in a first direction parallel to a central axis of the wiper blade and are arranged in first and second lateral sides, respectively, of the blade rubber that are opposed to one another in a second direction perpendicular to the first direction and generally parallel to the wiping surface;

two secondary grooves, which extend in the first direction and are arranged in the first and second lateral sides, respectively, of the blade rubber; and

at least one holding portion;

two backing plates that extend in the first direction and are received in the primary grooves, respectively, of the blade rubber; and

a holder that is rotatably connected to the wiper arm and detachably holds the blade rubber, which has the backing plates, wherein the holder includes at least one pair of claws, which are received in the secondary grooves, respectively, of the blade rubber, and the at least one holding portion of the blade rubber

engages with the holder to limit movement of the holder in the first direction.

21. The wiper blade according to claim 20, wherein the at least one holding portion of the blade rubber is provided in at least one of the secondary grooves.

22. The wiper blade according to claim 20, wherein the at least one holding portion of the blade rubber holds the holder at a longitudinal center of the blade rubber.

23. The wiper blade according to claim 20, wherein:

each holding portion of the blade rubber has a slope;

a distance between the holder and a first end of the slope of each holding portion is smaller than a distance between the holder and a second end of the slope of the holding portion; and

a distance between a central axis of the blade rubber and the first end of the slope of each holding portion is greater than a distance between the central axis of the blade rubber and the second end of the slope of the holding portion.

24. The wiper blade according to claim 20, wherein:

the at least one pair of claws of the holder includes first and second pairs of claws;

the first pair of claws is spaced from the second pair of claws in the first direction;

the at least one holding portion of the blade rubber

includes first and second pairs of holding portions;

the holding portions of each pair are provided in the secondary grooves, respectively; and

the first pair of holding portions is spaced from the second pair of holding portions in the first direction, such that the first and second pairs of claws are positioned between the first pair of holding portions and the second pair of holding portions.

25. A wiper system that wipes a wiping surface of a vehicle, the wiper system comprising:

a wiper arm; and

a wiper blade that is rotatably connected to the wiper arm, wherein the wiper blade includes:

a blade rubber that wipes the wiping surface and includes two primary grooves, wherein the primary grooves extend in a first direction parallel to a central axis of the wiper blade and are arranged in first and second lateral sides, respectively, of the blade rubber that are opposed to one another in a second direction perpendicular to the first direction and generally parallel to the wiping surface;

two backing plates that extend in the first direction and are received in the primary grooves, respectively, of the blade rubber;

a holder that is rotatably connected to the wiper arm and detachably holds the blade rubber, which has the backing plates; and

a resilient fin that extends in the first direction

and is connected to the holder, wherein the fin limits lifting of the wiper blade from the wiping surface when the vehicle is running.

26. A wiper system that wipes a wiping surface of a vehicle, the wiper system comprising:

a wiper arm; and

a wiper blade that is rotatably connected to the wiper arm, wherein the wiper blade includes:

a blade rubber that wipes the wiping surface and includes:

two primary grooves, which extend in a first direction parallel to a central axis of the wiper blade and are arranged in first and second lateral sides, respectively, of the blade rubber that are opposed to one another in a second direction perpendicular to the first direction and generally parallel to the wiping surface;

two secondary grooves, which extend in the first direction and are arranged in the first and second lateral sides, respectively, of the blade rubber; and

at least one holding portion;

two backing plates that extend in the first direction and are received in the primary grooves, respectively, of the blade rubber; and

a holder that is rotatably connected to the wiper arm and detachably holds the blade rubber, which has the backing plates, wherein the holder includes at least one pair of claws,

which are received in the secondary grooves, respectively, of the blade rubber, and the at least one holding portion of the blade rubber engages with the holder to limit movement of the holder in the first direction.